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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/517,511

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Elena Voltolina

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EXAMINER

BALAOING, ARIEL A

ART UNIT

PAPER NUMBER

2617

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DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/517,511	<b>Applicant(s)</b> VOLTOLINA ET AL.	
	<b>Examiner</b> ARIEL BALAOING	<b>Art Unit</b> 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 December 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The information disclosure statement filed 12/10/2004 fails to comply with 37 CFR 1.98(a)(1), which requires the following: (1) a list of all patents, publications, applications, or other information submitted for consideration by the Office; (2) U.S. patents and U.S. patent application publications listed in a section separately from citations of other documents; (3) the application number of the application in which the information disclosure statement is being submitted on each page of the list; (4) a column that provides a blank space next to each document to be considered, for the examiner's initials; and (5) a heading that clearly indicates that the list is an information disclosure statement. The information disclosure statement has been placed in the application file, but the information referred to therein has not been considered.

### ***Priority***

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Specification***

3. The abstract of the disclosure is objected to because the abstract includes the language "The present invention relates to" which is a phrase that can be implied. Correction is required. See MPEP § 608.01(b), section C.

### ***Claim Rejections - 35 USC § 103***

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4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 1-4, 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over KALL et al (US 2003/0043786 A1) in view of SARKKINEN et al (US 2003/0134653).

Regarding claim 1, KALL discloses a method for providing broadcast/multicast service in a mobile telecommunication system (Figures 1-4) having at least one serving support node **32**, at least one radio network controller **36** and means for radio communication with at least two user equipments **12** subscribing to said broadcast/multicast service, comprising the steps of: providing multimedia broadcast/multicast data from said at least one serving support node to said at least two user equipments, using a common user plane **66, 108** between a first serving support node of said at least one serving support node and a first radio network controller of said at least one radio network controller for multimedia broadcast/multicast data to at least a first user equipment and a second user equipment of said at least two user equipments (abstract; paragraph 15-17, 34, 35; multicast of data between SGSNs and UEs). However, KALL does not expressly disclose the use of multimedia broadcast/multicast. In the same field of endeavor, SARKKINEN discloses providing multimedia broadcast/multicast service in a mobile telecommunication system having at least one serving support node, at least one radio network controller and means for radio communication with at least two user equipments subscribing to said multimedia broadcast/multicast service (FIGURE 5; paragraph 7, 8). Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify KALL to include the teachings of SARKKINEN, since the use multimedia broadcast/multicast service would provide the multicasting of KALL with a standardized method for multicasting multimedia data.

Regarding claim 2, see the rejections of the parent claim concerning the subject matter this claim is dependent upon. KALL further discloses wherein all said at least two user equipments within a service area use said common user plane (Figure 2; paragraph 34, 35; UE1 and UE2).

Regarding claim 3, see the rejections of the parent claim concerning the subject matter this claim is dependent upon. KALL further discloses wherein said first user equipment has said first radio network controller as serving radio network controller and said second user equipment has a second radio network controller as serving radio network controller, whereby a communication path of a control plane of at least one of said first and second user equipment is separated from a communication path of said first user plane (Figure 2; paragraph 34, 35; UE3, UE4, and UE5 use differing RNCs). Furthermore, it has been held that the functional "whereby" statement does not define any structure and accordingly cannot serve to distinguish. *In re Mason*, 114 USPQ 127, 44 CCPA 937 (1957).

Regarding claim 4, see the rejections of the parent claim concerning the subject matter this claim is dependent upon. KALL further discloses wherein a communication path of said control plane of said second user equipment is separated from said communication path of said first user plane (Figure 2; paragraph 34, 35; user plane of either UE1 or UE2 would inherently be separated from the control plane of UE3 since the control plane is used to provide control signals between a node and the RNC. All UEs are serviced by the same SGSN. Furthermore UE4 and UE5 would also provide separate control and user planes).

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Regarding claim 12, KALL discloses a controlling radio network controller **36** in a mobile telecommunication system having at least one serving support node **32** and means for radio communication with at least two user equipments **12** subscribing to a broadcast/multicast service (abstract), comprising: means for providing broadcast/multicast data from said at least one serving support node to said at least two user equipments, means for using a common user plane **66, 108** between a first serving support node of said at least one serving support node and a first radio network controller of said at least one radio network controller for broadcast/multicast data to at least a first user equipment and a second user equipment of said at least two user equipments (abstract; paragraph 15-17, 34, 35; multicast of data between SGSNs and UEs using common channels). However, KALL does not expressly disclose the use of multimedia broadcast/multicast. In the same field of endeavor, SARKKINEN discloses providing multimedia broadcast/multicast service in a mobile telecommunication system having at least one serving support node, at least one radio network controller and means for radio communication with at least two user equipments subscribing to said multimedia broadcast/multicast service (FIGURE 5; paragraph 7, 8). Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify KALL to include the teachings of SARKKINEN, since the use multimedia broadcast/multicast service would provide the multicasting of KALL with a standardized method for multicasting multimedia data.

Regarding claim 13, see the rejections of the parent claim concerning the subject matter this claim is dependent upon. KALL further discloses wherein said means for

using a common user plane is arranged to handle communication to all said at least two user equipments within a service area (Figure 2; paragraph 34, 35; UE1 and UE2).

Regarding claim 14, see the rejections of the parent claim concerning the subject matter this claim is dependent upon. KALL further discloses wherein an interface to a second radio network controller serving as serving radio network controller of said second user equipment, and means for separating a communication path of a control plane of at least one of said first and second user equipment from a communication path of said first user plane (Figure 2; paragraph 34, 35; UE3, UE4, and UE5 use differing RNCs). Furthermore, it has been held that the functional "whereby" statement does not define any structure and accordingly cannot serve to distinguish. *In re Mason*, 114 USPQ 127, 44 CCPA 937 (1957).

Regarding claim 15, see the rejections of the parent claim concerning the subject matter this claim is dependent upon. KALL further discloses wherein said means for separating is arranged to separate said communication path of said control plane of said second user equipment from said communication path of said first user plane (Figure 2; paragraph 34, 35; user plane of either UE1 or UE2 would inherently be separated from the control plane of UE3 since the control plane is used to provide control signals between a node and the RNC. All UEs are serviced by the same SGSN. Furthermore UE4 and UE5 would also provide separate control and user planes).

8. Claims 5-11, 16-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over KALL et al (US 2003/0043786 A1) in view of SARKKINEN et al (US 2003/0134653) in further view of CHUAH (US 2003/0076803 A1).



Regarding claim 5, see the rejections of the parent claim concerning the subject matter this claim is dependent upon. However, the combination of KALL and SARKKINEN does not expressly disclose further comprising the step of communicating MBMS information of said second user equipment from said second radio network controller to said first radio network controller. In the same field of endeavor, CHUAU discloses communicating multicast information of a second user equipment from a second radio network controller to a first radio network controller (abstract; paragraph 20, 21, 23). Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify CHUAU to include the teachings of SARKKINEN, since SARKKINEN teaches that such a modification would provide improved system performance and load balancing (see paragraph 11).

Regarding claim 6, see the rejections of the parent claim concerning the subject matter this claim is dependent upon. The combination of KALL, SARKKINEN, and CHUAH further discloses wherein said MBMS information of said second user equipment (50C-D) comprises an attach request (CHUAH - paragraph 20, 21, 23; handover involves attach and release to and from a node and/or basestation controller).

Regarding claim 7, see the rejections of the parent claim concerning the subject matter this claim is dependent upon. The combination of KALL, SARKKINEN, and CHUAH further discloses further comprising the step of determining, in said first radio network controller, whether use of common resources for MBMS data is favorable, based on said MBMS information communicated from said second radio network controller (KALL - paragraph 15-17, 34, 35; multicast data (common channel broadcast)

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based on determined user terminals; SARKKINEN – paragraph 51, 52; updated multicast tables).

Regarding claim 8, see the rejections of the parent claim concerning the subject matter this claim is dependent upon. The combination of KALL, SARKKINEN, and CHUAH further comprising the step of communicating information associated with MBMS from said first radio network controller to said second radio network controller (CHUAH - paragraph 20, 21, 23).

Regarding claim 9, see the rejections of the parent claim concerning the subject matter this claim is dependent upon. The combination of KALL, SARKKINEN, and CHUAH further discloses wherein said information associated with MBMS communicated from said first radio network controller to said second radio network controller comprises an attach response (CHUAH - paragraph 20, 21, 23; handover involves attach and release to and from a node and/or basestation controller).

Regarding claim 10, see the rejections of the parent claim concerning the subject matter this claim is dependent upon. The combination of KALL, SARKKINEN, and CHUAH wherein said information associated with MBMS communicated from said first radio network controller to said second radio network controller comprises an indication of transferring between a mode using said common user plane and a mode using dedicated user planes (KALL – paragraph 16, 17, 19; unicast and multicast determination).

Regarding claim 11, see the rejections of the parent claim concerning the subject matter this claim is dependent upon. The combination of KALL, SARKKINEN, and

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CHUAH wherein said information associated with MBMS communicated from said first radio network controller to said second radio network controller comprises a request to remove any dedicated user planes to said second radio network controller for said at least one user equipment (KALL – paragraph 16, 17, 19; unicast and multicast determination; SARKKINEN – paragraph 51, 52; updated multicast tables).

Regarding claim 16, see the rejections of the parent claim concerning the subject matter this claim is dependent upon. However, the combination of KALL and SARKKINEN does not expressly disclose wherein said interface is arranged to communicate MBMS information of said second user equipment from said second radio network controller to said first radio network controller. In the same field of endeavor, CHUAH discloses wherein an interface is arranged to communicate multicast information of a second user equipment from a second radio network controller to a first radio network controller (abstract; paragraph 20, 21, 23). Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify CHUAU to include the teachings of SARKKINEN, since SARKKINEN teaches that such a modification would provide improved system performance and load balancing (see paragraph 11).

Regarding claim 17, see the rejections of the parent claim concerning the subject matter this claim is dependent upon. The combination of KALL, SARKKINEN, and CHUAH further discloses further comprising means for determining whether use of common resources for MBMS data is favorable, based on said MBMS information communicated from said second radio network controller (KALL - paragraph 15-17, 34,

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35; multicast data (common channel broadcast) based on determined user terminals; SARKKINEN – paragraph 51, 52; updated multicast tables).

Regarding claim 18, see the rejections of the parent claim concerning the subject matter this claim is dependent upon. The combination of KALL, SARKKINEN, and CHUAH further discloses wherein said interface is further arranged to communicate information associated with MBMS from said first radio network controller to said second radio network controller (CHUAH - paragraph 20, 21, 23).

Regarding claim 19, see the rejections of the parent claim concerning the subject matter this claim is dependent upon. KALL discloses a serving radio network controller **36** in a mobile telecommunication system having at least one serving support node **32**, at least one further radio network controller **36** and means for radio communication with at least two user equipments **12** subscribing to a broadcast/multicast service, said serving radio network controller comprising: means for providing broadcast/multicast service control signaling to a first of said at least two user equipments, interface to a first of said at least one further radio network controller serving as controlling radio network controller of said at least two user equipments, said interface is arranged to communicate multicast information of said first said at least two user equipments from said serving radio network controller (abstract; paragraph 7, 8, 15-17, 34, 35). However, KALL does not expressly disclose the use of multimedia broadcast/multicast. In the same field of endeavor, SARKKINEN discloses providing multimedia broadcast/multicast service in a mobile telecommunication system having at least one serving support node, at least one radio network controller and means for radio

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communication with at least two user equipments subscribing to said multimedia broadcast/multicast service (FIGURE 5; paragraph 7, 8). Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify KALL to include the teachings of SARKKINEN, since the use multimedia broadcast/multicast service would provide the multicasting of KALL with a standardized method for multicasting multimedia data. However, the combination of KALL and SARKKINEN does not expressly disclose communicating MBMS information of said serving radio network controller to said further radio network controller. In the same field of endeavor, CHUAU discloses communicating multicast information of a serving radio network controller to a further radio network controller (abstract; paragraph 20, 21, 23). Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify CHUAU to include the teachings of SARKKINEN, since SARKKINEN teaches that such a modification would provide improved system performance and load balancing (see paragraph 11).

Regarding claim 20, see the rejections of the parent claim concerning the subject matter this claim is dependent upon. The combination of KALL, SARKKINEN, and CHUAH further discloses wherein said interface is further arranged to communicate information associated with MBMS from said first of said at least one further radio network controller to said serving radio network controller (abstract; paragraph 20, 21, 23).

Regarding claim 21, see the rejections of the parent claim concerning the subject matter this claim is dependent upon. The combination of KALL, SARKKINEN, and

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CHUAH further discloses further comprising means for removing a user plane for multimedia broadcast/multicast data to said first of said at least two user equipments in response to said information associated with MBMS requesting such removing. (KALL - paragraph 15-17, 34, 35; multicast data (common channel broadcast) based on determined user terminals; SARKKINEN – paragraph 51, 52; updated multicast tables).

### ***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

WALLENTIN (US 2002/0168984 A1) – Releasing plural radio connections

VIALEN et al (US 2002/0044552 A1) – Integrity check in a communication system

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ARIEL BALAOING whose telephone number is (571)272-7317. The examiner can normally be reached on Monday-Friday from 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, V. Paul Harper can be reached on (571) 272-7605. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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